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(54) Title: SYNTHESIS OF EQUIMOLAR MULTIPLE OLIGOMER MIXTURES, ESPECIALLY OF OLIGOPEPTIDE MIXTURES

(57) Abstract

A process for the synthesis of a complex mixture pool of solid support-coupled monomeric repeating unit compounds such as amino acid derivatives is disclosed in which the mixture pool contains an equimolar representation of reacted monomeric repeating unit compounds coupled. Also disclosed is a process for the stepwise synthesis of a complex mixture of coupled or free, unsupported oligomers such as oligopeptides. A set of self-solubilizing, unsupported mixed oligopeptides having one or more predetermined amino acid residues at one or more of the same, predetermined positions in the oligopeptide chain in which the set contains equimolar amounts of a plurality of different amino acid residues, preferably at least six different residues, at one or more of the same predetermined positions of the oligopeptide chain is also disclosed, as are methods of making and using the same.